GALILEO ON JUPITER APPROACH

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After six years of interplanetary flight, in just two months, on December 7, 1995, Galileo will arrive at Jupiter. in July, Galileo released its Atmospheric Entry Probe on the five-month solo, ballistic flight to Jupiter entry. After Probe release, the Orbiter fired its 400N main engine for the first time to deflect the Orbiter to its Io flyby aim point establishing the trajectory for Probe radio relay link acquisition and orbit insertion. The 400N engine was specifically used for the deflection in order to check it out prior to orbit insertion,

Last February, the Galileo Orbiter Command and Data Subsystem (CDS) and Attitude and Articulation Control Subsystem (AACS) computers were completely re-loaded to provide new software capabilities for main engine and relay link autonomous fault protection and for backup Probe data storage on the Orbiter. The execution and results of this complete inflight software change are discussed. The status of the Entry Probe prior to release is described--once released there is no communication link with the Probe until after entry. The operation and performance of the 400N main engine at the deflection burn is explained in the context of its required usc for orbit insertion,

Final predictions for the Probe entry conditions, Probe-to-Orbiter radio relay link, and Orbiter insertion performance are given. Overall mission status and spacecraft health are summarized.